Datasheet for ABIN5518804

anti-AMY1A antibody (N-Term)

2 Images

Go to Product page

Overview

Quantity:	100 µg
Target:	AMY1A
Binding Specificity:	AA 20-50, N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This AMY1A antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purpose:	Anti-Amylase/AMY1A/AMY1B/AMY1C Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human Alpha Amylase 1, different from the related mouse sequence by five amino acids, and from the related rat sequence by six amino acids.
Sequence:	NTQQGRTSIV HLFEWRWVDI ALECERYLAP K
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-Amylase/AMY1A/AMY1B/AMY1C Antibody Picoband® (ABIN5518804). Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are

Product Details

	designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	AMY1A
Alternative Name:	AMY1A (AMY1A Products)
Background:	Synonyms: Alpha-amylase 1,3.2.1.1,1,4-alpha-D-glucan glucanohydrolase 1,Salivary alpha-amylase,AMY1A,AMY1,AMY1B,AMY1,AMY1C,AMY1, Tissue Specificity: Highly expressed in the kidney, brain and testis and to a lower extent in heart, liver and small intestine. Expressed in the lens, cornea and retina. Strongly expressed in the distal tips of the retinal neuroepithelium that form the iris and ciliary body. Background: Amylase is an enzyme that catalyses the breakdown of starch into sugars. Amylase is present in human saliva, where it begins the chemical process of digestion. By in situ hybridization combined with high resolution cytogenetics, the amylase gene is mapped to 1p21. Amylase enzymes find use in bread making and to break down complex sugars such as starch (found in flour) into simple sugars. Yeast then feeds on these simple sugars and converts it into the waste products of alcohol and CO2.
Molecular Weight:	58 kDa
Gene ID:	276, 277, 278
UniProt:	P04745

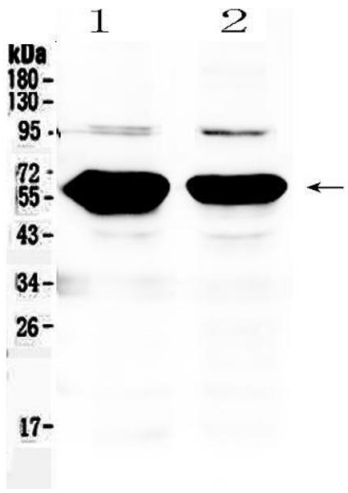
Application Details

Application Notes:	Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL, Human Western blot, 0.1-0.5 µg/mL, Mouse, Rat, Human 1. Dracopoli, N. C., Meisler, M. H.Mapping the human amylase gene cluster on the proximal short arm of chromosome 1 using a highly informative (CA)n repeat.Genomics 7: 97-102, 1990. 2. Gumucio, D. L., Wiebauer, K., Caldwell, R. M., Samuelson, L. C., Meisler, M. H.Concerted evolution of human amylase genes.Molec. Cell. Biol. 8: 1197-1205, 1988. 3. Kamaryt, J., Laxova, R.Amylase heterogeneity: some genetic and clinical aspects.Humangenetik 1: 579-586, 1965.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

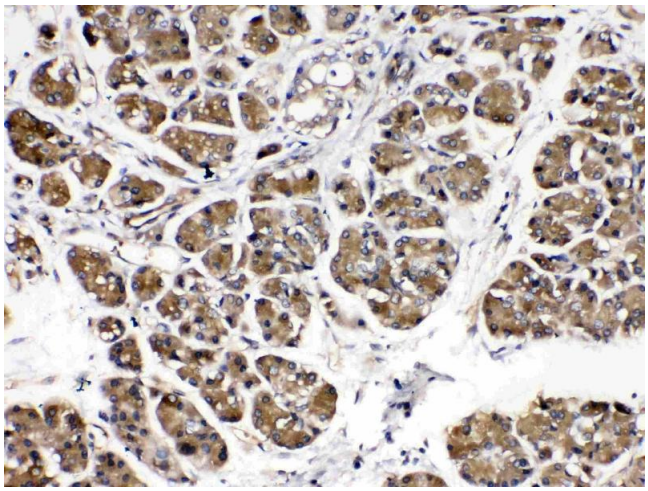
Images



Western Blotting

Image 1. Western blot analysis of Alpha Amylase 1 using anti- Alpha Amylase 1 antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat pancreas tissue lysates, Lane 2: mouse pancreas tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- Alpha Amylase 1 antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for

Alpha Amylase 1 at approximately 58KD. The expected band size for Alpha Amylase 1 is at 58KD.



Immunohistochemistry

Image 2. IHC analysis of Alpha Amylase 1 using anti- Alpha Amylase 1 antibody . Alpha Amylase 1 was detected in paraffin-embedded section of human pancreatic cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-Alpha Amylase 1 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.